

## References

### Literature cited

- [DWR] California Department of Water Resources. 1962. Article 19. Water Quality. Standard Provisions for Water Supply Contract. First approved 3 Aug 1962 and subsequently executed with each of the State Water Project contractors
- [DWR] California Department of Water Resources, Division of Local Assistance, Water Resources Assessment Program. 1990. Delta Island Drainage Investigation Report of the Interagency Delta Health Aspects Monitoring Program: A Summary of Observations During Consecutive Dry Year Conditions, Water Years 1987 and 1988. June.
- [DWR] California Department of Water Resources, Division of Local Assistance, Water Quality Assessment Branch. 1994. Five-year Report of the Municipal Water Quality Investigations Program, Summary and Findings During Five Dry Years, January 1987-December 1991. Nov.
- [DWR] California Department of Water Resources, Division of Local Assistance, Water Quality Assessment Branch. 1995. 1992-1993 Biennial Memorandum Report of the Municipal Water Quality Investigations Program. Apr.
- [DWR] California Department of Water Resources, Division of Local Assistance, Water Quality Assessment Branch. 1995. Data Report of the Municipal Water Quality Investigations Program, Summary of Monitoring Results, Water Year 1994. July.
- [DWR] California Department of Water Resources, Division of Local Assistance, Water Quality Assessment Branch. 1996. Municipal Water Quality Investigations Program Annual Report, Water Year 1995. Aug.
- [DWR] California Department of Water Resources, Division of Planning and Local Assistance, Water Quality Assessment Branch. 1997. Municipal Water Quality Investigations Program Annual Report, October 1995-December 1996. Dec.
- [DWR] California Department of Water Resources, Division of Planning and Local Assistance, Water Quality Assessment Branch. 2000. Municipal Water Quality Investigations Program Annual Report, 1997-1998. Oct.
- [DWR] California Department of Water Resources, Division of Planning and Local Assistance, Water Quality Assessment Branch, Municipal Water Quality Investigations Program. 2001. California State Water Project Watershed Sanitary Survey Update Report 2001. Sacramento: Under the direction of State Water Contractors. 2 v. (various pagings) p. Dec.
- [SWRCB] California State Water Resource Control Board. 2000. Water Right Decision 1641 (revised). <http://www.waterrights.ca.gov/baydelta/dl1641.htm>. Accessed on 12 Mar 2002.
- Eaton AD, Clesceri LS, Greenberg AE, Franson MAH, American Public Health Association, American Water Works Association, Water Environment Federation. 1995. Standard methods for the examination of water and wastewater. 19<sup>th</sup> edition. Washington, DC: American Public Health Association. p 5-60.
- Fong S. 2002. Bryte Chemical Laboratory quality assurance manual. Quality Assurance Technical Document 8. Sacramento: Bryte Chemical Laboratory, Water Quality Assessment Branch, Environmental Services Division, California Department of Water Resources. Apr.
- Helsel DR, Hirsch RM. 1992. Statistical Methods in Water Resources. Amsterdam, the Netherlands; New York: Elsevier Science B.V. xvi, 522 p.
- SAS Institute Inc. 1999. Chapter 38 "The Loess Procedure". SAS/STAT User's Guide. Version 8 ed. Cary, NC: SAS Institute. p 1853-1900.
- [EPA] US Environmental Protection Agency, Office of Water. 1998 (Dec). Stage 1 Disinfectants and Disinfection Byproducts Rule. <http://www.epa.gov/cgi-bin/epaprintonly.cgi>. Accessed on 20 Sep 2002.
- [EPA] US Environmental Protection Agency, Office of Water. 2000. Nutrient Criteria Technical Guidance Manual for Lakes and Reservoirs. 1st edition. Washington, DC: US Environmental Protection Agency. Report nr EPA-822-B00-001.

Woodard R. 2000. Sources and Magnitudes of Water Quality Constituents of Concern in Drinking Water Supplies Taken from the Sacramento-San Joaquin Delta. Prepared for the CALFED Bay-Delta Program. 22 Sep.

## **Personal communications**

Agee B, MWQI. 2000. Changes in the measurement of total organic carbon at Bryte Laboratory. Office memorandum to Bryte Laboratory customers measuring TOC. 15 Dec.

Agee B, MWQI. 2001. Estimated DOC/TOC ratios for modeling purposes. Office memorandum to Paul Hutton. 17 May.

Agee B, MWQI. 2002. Comparability codes for Bryte Laboratory data. e-mail to Bryte Chemical Laboratory customers. 1 Mar.

Breuer RS, MWQI. 2002. Office discussion with Fengmao Guo. 14 Nov.

Holm L, Contra Costa Water District. 2003. Review comments. Sent to RS Breuer via Richard Woodard. 10 Feb.

Holm L and Denton R, Contra Costa Water District. 2003. Review comments. Sent to RS Breuer via Richard Woodard. 10 Feb.

Matthews D, Santa Clara Valley Water District. 2001. e-mail to Mike Zanolli, MWQI. 23 July.

McCune B, MWQI. 2002. Office discussion on boron in San Joaquin Valley and rice drainage to NEMDC from Reclamation District 1000 Pump # 6. 18 Dec.

Woodard R, State Water Contractors. 2003. Review comments. Sent to RS Breuer. 10 Feb.

## Glossary

### A

**af**

acre-foot/acre-feet

**AL(s)**

action level(s)

**APHA**

American Public Health Association

**AWWA**

American Water Works Association

### B

**BLM**

US Bureau of Land Management

### C

**CCWD**

Contra Costa Water District

**CDEC**

California Data Exchange Center

**cfs**

cubic feet per second

**CIMIS**

California Irrigation Management Information System

**CVP**

Central Valley Project

**CVRWQCB**

Central Valley Regional Water Quality Control Board

### D

**D/DBP(s)**

disinfectant/disinfection byproduct(s)

**DES**

Division of Environmental Services

**DHS**

California Department of Health Services

**DMC**

Delta-Mendota Canal

**DOC**

dissolved organic carbon

**DWR**

California Department of Water Resources

### E

**EC**

electrical conductivity

**EPA**

US Environmental Protection Agency

**ESWTR**

Enhanced Surface Water Treatment Rule

**F**

**FLIMS**

Field and Laboratory Information Management System

**H**

**HAAs**

Haloacetic acids

**I**

**IEP**

Interagency Ecological Program

**IQR**

interquartile range

**L**

**L**

Liters

**LCS**

Laboratory control sample

**M**

**maf**

million acre-feet

**MCL**

maximum contaminant level

**MDL**

method detection limit

**mg/L**

milligrams per liter

**MTBE**

methyl tertiary-butyl ether

**MWDSC**

Metropolitan Water District of Southern California

**MWQI**

DWR Municipal Water Quality Investigations

**N**

**NEMDC**

Natomas East Main Drainage Canal

**nm**

nanometers

**NTU(s)**

nephelometric turbidity unit(s)

**O**

**O&M**

DWR Division of Operations and Maintenance

**OWQ**

Office of Water Quality

**P**

**pH**

negative log of the hydrogen ion activity

**POC**

particulate organic carbon

**Q**

**QA/QC**

quality assurance/quality control

**R**

**RPD**

relative percent difference

**S**

**SJR**

San Joaquin River

**SRWTP**

Sacramento Regional Wastewater Treatment Plant

**SUVA<sub>254</sub>**

Specific UVA<sub>254</sub>

**SWC**

State Water Contractors

**SWP**

State Water Project

**SWRCB**

State Water Resources Control Board

**SWTR**

Surface Water Treatment Rule

**T**

**TCAA**

trichloroacetic acid

**TDS**

total dissolved solids

**THM**

trihalomethane

**TKN**

total Kjeldahl nitrogen

**TOC**

total organic carbon

**TSS**

total suspended solids

**TTHMFP**

total trihalomethane formation potential

**U**

**USBR**

US Bureau of Reclamation

**US EPA**

see EPA

**UVA<sub>254</sub>**

ultraviolet absorbance measured at a wavelength of 254 nanometers

**W**

**WTP**

water treatment plant

**WWTP**

waste water treatment plant

**μ**

**μg/L**

micrograms per liter

**μm**

micrometers

**μS/cm**

microsiemens per centimeter

## Metric Conversion Factors

Quantity	To Convert from Metric Unit	To Customary Unit	Multiply Metric Unit By	To Convert to Metric Unit Multiply Customary Unit By
Length	millimeters (mm)	inches (in)	0.03937	25.4
	centimeters (cm) for snow depth	inches (in)	0.3937	2.54
	meters (m)	feet (ft)	3.2808	0.3048
	kilometers (km)	miles (mi)	0.62139	1.6093
Area	square millimeters (mm <sup>2</sup> )	square inches (in <sup>2</sup> )	0.00155	645.16
	square meters (m <sup>2</sup> )	square feet (ft <sup>2</sup> )	10.764	0.092903
	hectares (ha)	acres (ac)	2.4710	0.40469
	square kilometers (km <sup>2</sup> )	square miles (mi <sup>2</sup> )	0.3861	2.590
Volume	liters (L)	gallons (gal)	0.26417	3.7854
	megaliters	million gallons (10 <sup>6</sup> )	0.26417	3.7854
	cubic meters (m <sup>3</sup> )	cubic feet (ft <sup>3</sup> )	35.315	0.028317
	cubic meters (m <sup>3</sup> )	cubic yards (yd <sup>3</sup> )	1.308	0.76455
	cubic dekameters (dam <sup>3</sup> )	acre-feet (ac-ft)	0.8107	1.2335
Flow	cubic meters per second (m <sup>3</sup> /s)	cubic feet per second (ft <sup>3</sup> /s)	35.315	0.028317
	liters per minute (L/mn)	gallons per minute (gal/mn)	0.26417	3.7854
	liters per day (L/day)	gallons per day (gal/day)	0.26417	3.7854
	megaliters per day (ML/day)	million gallons per day (mgd)	0.26417	3.7854
	cubic dekameters per day (dam <sup>3</sup> /day)	acre-feet per day (ac-ft/day)	0.8107	1.2335
Mass	kilograms (kg)	pounds (lbs)	2.2046	0.45359
	megagrams (Mg)	tons (short, 2,000 lb.)	1.1023	0.90718
Velocity	meters per second (m/s)	feet per second (ft/s)	3.2808	0.3048
Power	kilowatts (kW)	horsepower (hp)	1.3405	0.746
Pressure	kilopascals (kPa)	pounds per square inch (psi)	0.14505	6.8948
	kilopascals (kPa)	feet head of water	0.32456	2.989
Specific capacity	liters per minute per meter drawdown	gallons per minute per foot drawdown	0.08052	12.419
Concentration	milligrams per liter (mg/L)	parts per million (ppm)	1.0	1.0
Electrical conductivity	microsiemens per centimeter (μS/cm)	micromhos per centimeter	1.0	1.0
Temperature	degrees Celsius (°C)	degrees Fahrenheit (°F)	(1.8X°C)+32	0.56(°F-32)

